



Product Evaluation

WIN2227 | 0617

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: WIN-2227

Effective Date: June 1, 2017

Re-evaluation Date: June 2021

Product Name: Pinnacle Aluminum Clad Wood Casement Windows, Fin and Frame Installation, Impact Resistant

Manufacturer: Windsor Windows & Doors
900 S. 19th Street
West Des Moines, IA 50265
515-223-6660

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Pinnacle Aluminum Clad Wood Casement Window	LC-PG50 36x72-C Missile Level D	+/- 50 psf
2	Pinnacle Aluminum Clad Wood Casement Window	R-PG65 30x72-C Missile Level D	+/- 65 psf

Product Dimensions:

System	Overall Size	Sash Size
1	36" x 72"	34.11" x 70.13"
2	30" x 72"	28.13" x 70.13"

Product Identification (Certification Label on Window):

System		
1, 2	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Windsor Windows & Doors
	Product Name	Pinnacle Series – Clad Wood Frame Casement
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-0-4; ASTM E 1996-12; Missile Level D

Impact Resistance:

System	Impact Resistant	Requirement
1, 2	Yes	These products satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified are acceptable with the limitations specified in this report.

Installation:**System 1 (Use One of the Following):**

Option 1 (Aluminum Fin Installation): Use minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using minimum No. 8 screws. The fasteners are spaced approximately 4" from each corner and 8" on center along the perimeter of the window. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

Option 2 (Frame Installation –Clips): Use minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using galvanized steel clips (1-1/2" x 7-13/16" x 20-gauge). The clips are secured to the window frame with two No. 8 x 5/8" diameter screws. The clips are secured to the wall framing with No. 8 screws, one to the interior and one to the exterior. Along the head and sill, 3 clips are required, evenly spaced. Along each side jamb, 5 clips are required, evenly spaced. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 2 (Use One of the Following):

Option 1 (Aluminum Fin Installation): Use minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using minimum No. 8 screws. The fasteners are spaced approximately 4" from each corner and 8" on center along the perimeter of the window. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

Option 2 (Frame Installation –Clips): Use minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using galvanized steel clips (1-1/2" x 7-13/16" x 20-gauge). The clips are secured to the window frame with two No. 8 x 5/8" diameter screws. The clips are secured to the wall framing with No. 8 screws, one to the interior and one to the exterior. Along each side jamb, the clips are located approximately 6" from each corner and 12" on center. No clips are required along the head and the sill. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

Option 3 (Frame Installation –Screws): Use minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using minimum No. 10 x 3" screws. Along each side jamb, the clips are located approximately 6" from each corner and 12" on center. No screws are required along the head and the sill. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.